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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,334	12/12/2001	Edwin Espanola Bautista	CM03513J/10-41	1739
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POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190			HOLLOWAY III, EDWIN C	
			ART UNIT	PAPER NUMBER
			2635	7
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/020,334

Applicant(s)

BAUTISTA ET AL.

Examiner

Edwin C. Holloway, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Examiner's Response

1. In response to applicant's amendment filed 4-30-04, all the amendments to the specification and claims have been entered. The examiner has considered the new presentation of claims and applicant's arguments in view of the disclosure and the present state of the prior art. And it is the examiner's opinion that the claims are unpatentable for the reasons set forth in this Office action:

Claim Objections

2. Claims 5 and 17 are objected to because of the following informalities: Claims 5 and 17 recite "said duty cycle," but duty cycle is not recited in the claims for which claims 5 and 7 depend, neither directly nor indirectly. Note that claims 3 and 15 recite duty cycle, but claims 5 and 17 are not dependent on claims 3 and 15, respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 102 & 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 8, 11, 13, 20, 23 and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada (US 5438701).

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In reference to claim 1, Yamada discloses a selective call communications unit arranged and constructed for extended battery life comprising in combination:

- A first receiver having low power consumption for receiving a call signal to provide and enable signal (pager receiving circuit 32 in fig. 1)
- A messaging receiver different from said first receiver, activated by said enable signal, for receiving a message intended for the selective call communications unit (receiving circuit 23 in fig. 1).

See col. 3 line 21 - col. 4 line 46. The receiver 23 receives radio telephone (voice), picture or data communication (col. 3 line 31-36) that represents a message.

In reference to claim 13, Yamada discloses a selective call communications unit method of extending battery life, including the steps of:

- First, receiving a call signal using a first receiver 32 to provide an enable signal in a first low power consumption mode (Fig. 2 steps S3 and S4)
- Second, receiving responsive to said enable signal and in a second power consumption mode (Fig. 2 steps S4 and S7) using a messaging receiver 23 different from said first receiver, a

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message intended for the selective call communications unit (Fig. 2 step S8).

Claim 25 is similar to claim 1 with the addition of a transmitter activated by the enable signal. Claim 1 is taught as above and the transmitter of claim 25 is provided by the transmitting circuit 28 in fig. 1 of Yamada.

In reference to claim 8, claim 1 is taught as above. Yamada teaches that the messaging receiver is activated by said enable signal receives a protocol arranged for messaging purposes (radio telephone or other data in col. 3 lines 31-37)

In reference to claim 20, claim 13 is taught as above. Claim 20 is taught similar to claim 8 above.

In reference to claim 11, claim 1 is taught as above. Yamada teaches that the battery based power supply (col. 3 lines 61-68) with a power supply control switch (41) to power said first receiver and messaging receiver, wherein the expected battery life is about the shelf life for a battery included in the battery based power supply (Yamada extends battery life as long as possible through power conservation by power supply control unit 41 to operate the pager receiver intermittently and only operate the radio telephone when a paging call is received).

In reference to claim 23, claim 13 is taught as above.
Claim 23 is taught similar to claim 11 above.

In reference to claim 26, Yamada teaches claim 25. Claim 26 is similar to claim 11 with the addition of the transmitter of claim 25 and is therefore taught similar to claim 11 above.

5. Claims 2-3, 9, 14-15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) as applied above in view of applicant's admitted prior art.

In reference to claim 2, claim 1 is taught as above.
Yamada teaches that the first receiver is a low power receiver. Yamada does not teach that the receiver is a super regenerative receiver, regenerative receiver, tuned radio frequency receiver, ultrasonic receiver, or passive receiver. Applicant discloses in background section, page 2 lines 6-9, of the application that regenerative and passive receivers are well known in the art for having very low power consumption.

It would have been obvious by one skilled in the art at the time of invention to combine the teachings of Yamada with the suggestions of prior art to included in Yamada a type of receiver based upon the needs of the receiver. In addition, admitted prior art suggests that regenerative and passive

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receivers provide a very low power alternative to other types of receivers.

In reference to claim 14, claim 13 is taught as above.
claim 14 is taught similar to claim 2 above.

In reference to claim 3, claim 2 is taught as above.
Yamada teaches that the first receiver operates according to a duty cycle (intermittent receiving operation in col. 4 line 17). Yamada does not explicitly teach that the duty cycle is less than 50% (thereby being off more than it is on). Admitted prior art discloses selective call receivers that use a duty cycle comprising a periodic scheduled short on or wake cycle followed by a long off or sleep cycle, page 2, lines 1-3.

It would have been obvious to one skilled in the art at the time of invention to place the selective call (pager) receiver of Yamada in a duty cycle less than 50% because applicant admits that it is well known to include such duty cycle in such selective call receivers suggested by Yamada including intermittent receiving operation for low power consumption. One of ordinary skill in the art would recognize the tradeoffs between the latency/delay and power consumption associated with the duty cycle and would accommodate for the necessary minimum response time required to establish effective communication.

In reference to claim 15, claim 13 is taught as above.
Claim 15 is taught similar to claim 3 above.

In reference to claim 9, claim 8 is taught as above.
Yamada does not teach that the messaging protocol uses a direct sequence spread spectrum phase shift keyed modulation (DSSS PSK).

Applicant's admitted prior art teaches that the 802.15.3 and 802.15.4 standards from the IEEE use a physical layer that operates on DSSS PSK modulation (Page 8, lines 10-15).
It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Yamada with the suggestions of admitted prior art because Yamada teaches of using a radio telephone data receiver for reception of data and 802.15.3 and 802.15.4 (Zigbee) DSSS PSK are open standard for wireless personal area networks (WPAN) for use with cellular or radio telephones. In addition, using DSSS PSK as a physical layer modulation ensures inter-operability with other DSSS PSK modulated devices.

In reference to claim 21, claim 20 is taught as above.
Claim 21 is taught similar to claim 9 above.

6. Claims 4-6, 16-18 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) in view of

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applicant's admitted prior art as applied above and Siwiak (US 5239306).

In reference to claim 4, claim 2 is taught as above. Yamada teaches that the first (pager) receiver receives said call signal and remains powered up to demodulate and decode call signal (col. 3 lines 55-59 and col. 4 lines and col. 4 lines 15-20 but does not explicitly disclose detecting a selective call address. Siwiak discloses an analogous art selective call receiver that remains powered to allow decoder 106 to detect an address (See Fig 5a for chart detailing detection of selective call address according to step 516) with power conservation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the address detection of Siwiak to provide decoding of the paging call with power conservation.

In reference to claim 16, claim 14 is taught as above. Claim 16 is taught similar to claim 4 above.

In reference to claim 5, claim 4 is taught as above. Yamada teaches that the first (paging) receiver provides an enable signal (control signal) upon decoding a paging call (col. 4 lines 15-25. Yamada does not expressly describe that the pager receiver compares said selective call address to an address for the selective call communications unit and when said address

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matches provides said enable signal and when said address does not match resumes operation according to said duty cycle.

Siwiak discloses a selective call or pager receiver that decodes a paging call by comparing said selective call address to an address for the selective call communications unit and when said address matches provides said enable signal and when said address does not match resumes operation according to said duty cycle. (See Fig 5a for chart detailing comparison of selective call address to provide enable signal or resume duty cycle.

Enable signal exemplified by blocks 516, 518, and A. Resuming duty cycle exemplified by sequence of blocks 516, 518, 520, 522 or 524). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the decoding operation of claim 5 as taught by Siwiak provide decoding of the paging call with power conservation.

In reference to claim 17, claim 16 is taught as above. Claim 17 is taught similar to claim 5 above.

In reference to claim 6, claim 1 is taught as above. Siwiak teaches that the call signal is a frequency modulated FM signal (FM demodulator 108). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included frequency modulation in the paging signal of

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Yamada in the combination applied above because col. lines 15-17 of Siwiak teaches that virtually all conventional paging systems utilize frequency (FM) modulation.

In reference to claim 18, claim 13 is taught as above. Claim 18 is taught similar to claim 6 above.

In reference to claim 27, claim 1 is taught as above. Applicant's admitted prior art teaches of regenerative receivers as in claim 2 above. The combination of Yamada and Siwiak teaches that the receiver remains active to receive a call address as in claim 4 above.

It would have been obvious by one skilled in the art at the time of invention to combine the teachings of Yamada and Siwiak with the suggestions of prior art to include a known type of receiver based upon the needs of the receiver such as a regenerative receiver using Amplitude Modulation (AM). In addition, applicant's admitted prior art suggests that regenerative and passive receivers provide a very low power alternative to other types of receivers.

In reference to claim 28, claim 27 is taught as above. Siwiak teaches that the selective call unit contains a comparator for comparing selective call address with an address for the selective call communications unit and when said address matches provide said enable signal (Receiver unit contains data

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processing block 114 for processing signal from first receiver. Comparison, thus comparator implied, is done in step 516. Step 518 determines if enable signal should be raised for messaging receiver).

7. Claims 7, 10, 12, 19, 22, 24 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5438701) and Ghisler.

In reference to claim 7, claim 1 is taught as above. Ghisler teaches and analogous art pager mobile telephone combination with low power operation. Ghisler that the mobile telephone or messaging receiver is a superheterodyne or intermediate frequency receiver (Fig 4 and col. 9 line 58 - col. 10 line 4 including RF oscillator 125, RF demodulator 127 and IF demodulator 128). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the messaging receiver details of Ghisler in the messaging receiver to provide details of the mobile telephone demodulation in a device with reduced power consumption.

In reference to claim 19, claim 13 is taught as above. Claim 19 is taught similar to claim 7 above.

In reference to claim 10, claim 7 is taught as above. Siwiak and Ghisler teach that the power consumption of the said

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messaging receiver exceeds a power consumption of the said first receiver. See the abstracts.

In reference to claim 22, claim 19 is taught as above.
Claim 22 is taught similar to claim 10 above.

In reference to claim 12, claim 7 is taught as above.
Yamada teaches that the messaging receiver activated by the enable signal to wait a predetermined time to receives a call signal or power down if no call signal is received. (S7-S8 in fig. 4, col. 5 lines 1-12). Yamada does not teach that the messaging receiver detects a selective call address, but an address is considered to be part of the conventional mobile telephone call. Ghisler teaches decoding control signals such as FACCH and SACCH in col. 10 that inherently include addresses.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the message receiver of Yamada the address detection of claim 7 as exemplified by the FACCH and/or SACCH decoder of Ghisler for conventional mobile telephone call detection.

In reference to claim 24, claim 19 is taught as above.
Claim 24 is taught similar to claim 12 above.

In reference to claim 29, claim 1 is taught as above.
Claim 29 is taught similar to claim 12 above.

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In reference to claim 30, claim 29 is taught as above. According to claim 12 it would have been obvious to use a selective call-addressing scheme in the messaging receiver as taught by Ghisler. Further, Yamada teaches that the messaging receiver activated by the enable signal to wait a predetermined time to receives a call signal or power down if no call signal is received. (S7-S8 in fig. 4, col. 5 lines 1-12).

Response to Arguments

8. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection. The objections to the specification and rejection of the claims under 35 USC 112 made in the prior office action are overcome by applicant's amendment.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nonami (US 5054052), Metroka (US 5117449), Mizoguchi (US 5566364), Rotzoll (US 5790946) and Koilpillai (US 6678508) discloses selective call units with dual receivers and power conservation. Allen (US 5606313) discloses a selective call receiver with dual decoders.

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10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CONTACT INFORMATION

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact an Electronic Business Center (EBC) representatives at 703-305-3028 or toll free at 866-217-9197 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at ebc@uspto.gov. The

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Facsimile submissions may be sent via fax number (703) 872-9306 to customer service for entry by technical support staff. Questions regarding fax submissions should be directed to customer service voice line (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin C. Holloway, III whose telephone number is (703) 305-4818. The examiner can normally be reached on M-F (8:30-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704.

EH
7/11/04


EDWIN C. HOLLOWAY, III
PRIMARY EXAMINER
ART UNIT 2635